



**Amcrest AMC1080BC and AMC1080DM HDCVI Camera's  
User's Manual**

**Version 1.0.0**

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## Welcome

Thank you for purchasing our Amcrest HDCVI camera!

This user's manual is designed to be a reference tool for your system.

Please read the following safeguard and warnings carefully before you use this series product!

Please keep this user's manual well for future reference!

# Important Safeguards and Warnings

## 1 . Electrical safety

All installation and operation here should conform to your local electrical safety codes.

The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated 12V DC (24V AC) in the IEC60950-1.

We assume no liability or responsibility for any fires or electrical shock caused by improper handling or installation.

## 2 . Transportation security

Heavy stress, violent vibrations, or moisture are not allowed during transportation, storage, and installation.

## 3 . Installation

Do not apply power to the camera before completing installation.

Please install the proper power cut-off device during the installation connection.

Always follow the instruction guide the manufacturer's recommendations.

If this product is installed in the ceiling, please make sure the installation position can sustain the min 50N.

## 4 . Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

## 5 . Environment

This series camera should be installed in a cool, dry place away from direct sunlight or strong light, flammable materials, explosive substances, etc.

This series camera should work on the specified working temperature. Please keep it away from the electromagnetic radiating objects and environments.

Please keep the camera well ventilated.

Do not allow the water and other liquids into the camera.

## 6. Accessories

Be sure to use only the accessories recommended by manufacturer.

Before installation, please open the package and check all the components are included.

Contact your local retailer ASAP if something is broken in your package.

## 7. Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work.

Use the dry soft cloth to clean the device.

If there is too much dust, please use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device.

Please put the dustproof cap to protect the CCD (CMOS) component when you do not use the camera.

# 1 General Introduction

## 1.1 Overview

This series megapixel HD camera conforms to the HDCVI standard. It supports video signal high-speed long distance transmission without any delay. It can be controlled by the DVR conforming to the HDCVI.

## 1.2 Features

- High-performance CMOS image sensor, megapixel definition.
- Supports HD video and control signal coaxial transmission.
- Supports 75-3 coaxial cable transmission without any loss. 720P series transmission distance over 500m, 1080P series transmission distance over 300m.
- High speed, long distance real-time transmission.
- Supports HDCVI HD and analog SD switch output.
- 720P series support 720P@25, 720P@30, 720P@50, 720P@60.  
1080P series support 1080P@25, 1080P@30, 720P@25, 720P@30, 720P@50, 720P@60.
- Supports high performance 3D noise reduction (denoise), excellent performance in low illumination
- Supports ICR switch to utilize surveillance both in the daytime and at night.
- Supports OSD (on-screen display), suitable for user self-defined setup.
- Supports DC12V power supplying.
- IP66 compliance.
- Supports intelligent IR function, max IR distance 20m.

## 1.3 Specifications

Model Parameter	2 Megapixel HDCVI Mini IR Waterproof Fixed Camera Series	2 Megapixel HDCVI Mini IR Dome Camera Series
	AMC1080BC	AMC1080DM
Video Processor	1/2.9" 2.0 Mega Pixels CMOS	
Video Format	PAL/NTSC	
Effective Pixel	1984 (H) × 1105 (V)	
Min Illumination	0.005Lux@(F1.2,AGC ON), 0Lux with IR	
Electronic Shutter	1/3s~1/100,000s	
Video Standard	HDCVI compliance	
Video Frame Rate	PAL: 25fps@1080P, 25/50fps@720P NTSC: 30fps@1080P, 30/60fps@720P	
Lens Port	M12	
Lens Type	6mm (3.6/8mm optional)	3.6mm (6/8mm optional)
Day/Night Switch	ICR mechanic auto switch	

<b>Sync Mode</b>	INT	
<b>Video Output</b>	1-channel HDCVI high definition video output	
<b>White Balance</b>	Auto	
<b>Gain Control</b>	Auto	
<b>BLC</b>	Auto	
<b>IR Light Control Plan</b>	Advanced non-photosensor control plan	
<b>Transmission Distance</b>	Over 300m for 720P and 500m for 1080P via 75-3 coaxial cable.	
<b>Smart IR</b>	Support	
<b>Max IR Distance</b>	20m	
<b>Protection Level</b>	IP66	
<b>Working Temperature /Humidity</b>	-30°C~+60°C. Humidity is less than 95%(non condensation)	
<b>Power</b>	DC 12V±10%	
<b>Power Consumption</b>	4.5W MAX (Input: 12V === 0.29A)	6W MAX (Input: 12V === 0.21A)
<b>Dimension(mm)</b>	74.9×72.9×166.1	Φ 94.0×94.0
<b>Weight</b>	380g	330g
<b>Installation Mode</b>	Wall mount	Wall mount/In-ceiling mount

## 2 Framework and Dimensions

Please refer to the following figures for dimension information. The unit is mm. See Figure 2-1 to Figure 2-4.

### 2.1 AMC1080BC

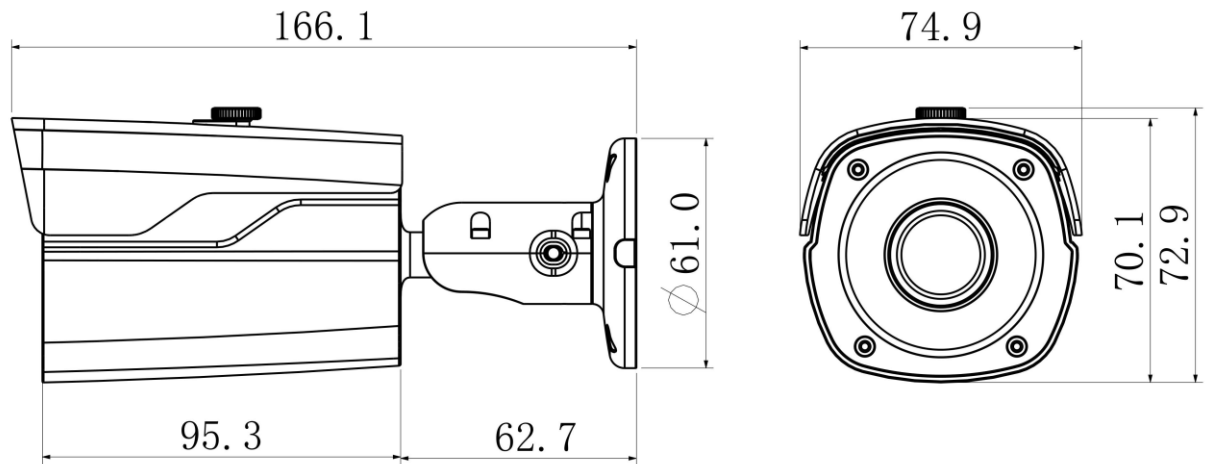


Figure 2-1

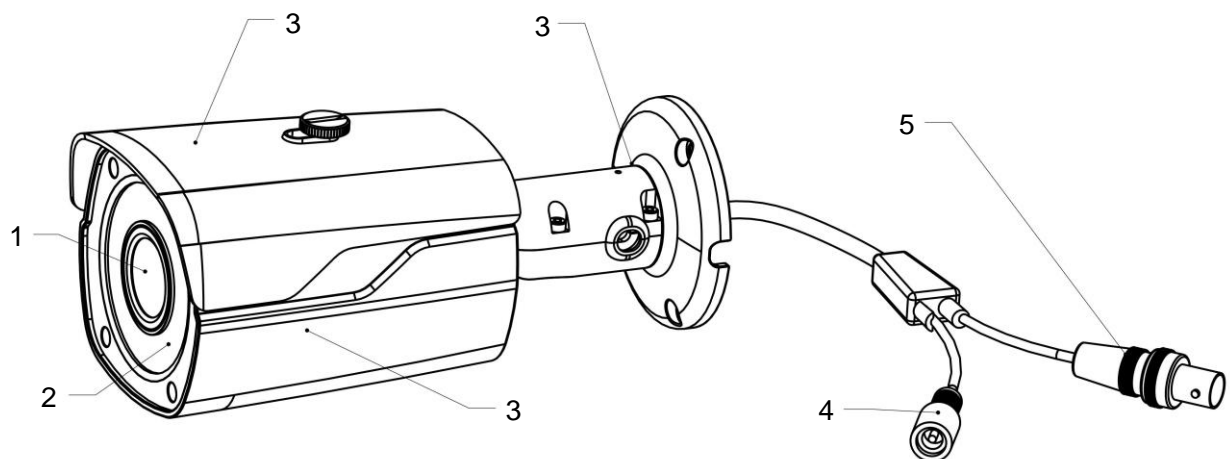


Figure 2-2

Please refer to the following sheet for detailed information.

SN	Name	Function
1	Lens	This is to receive the optical signal from the environment.
2	IR light	This is to send out the IR compensation light to enhance the night vision.
3	Device body	This is the main supporting part of the camera. It includes sunshield cap, front cap, rear part, bracket, etc.
4	Power input port	Connects to the DC 12V power supply.
5	Video output port	BNC port is used to output HDCVI video signal. You can connect this to devices such as the DVR or the NVS conforming to the HDCVI specifications.



## 2.2 AMC1080DM

Please refer to the following figures for dimension information. The unit is mm.

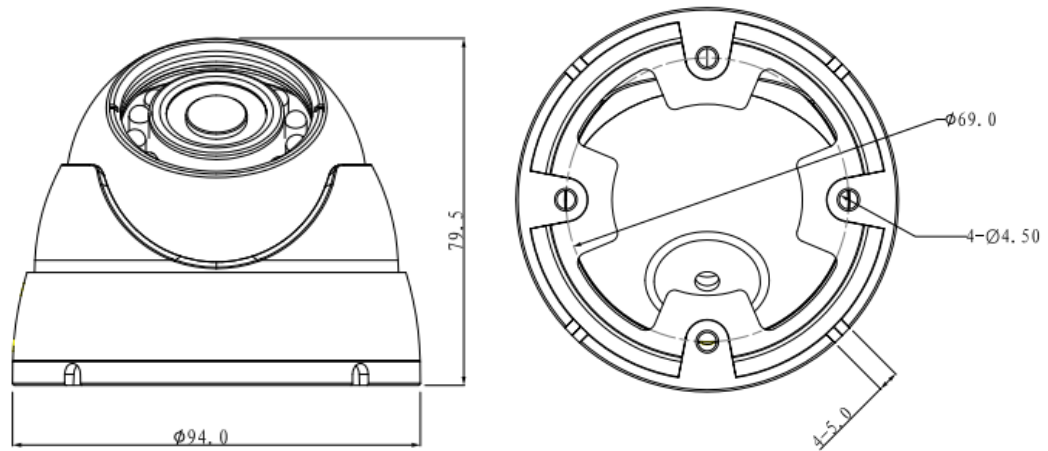


Figure 2-3

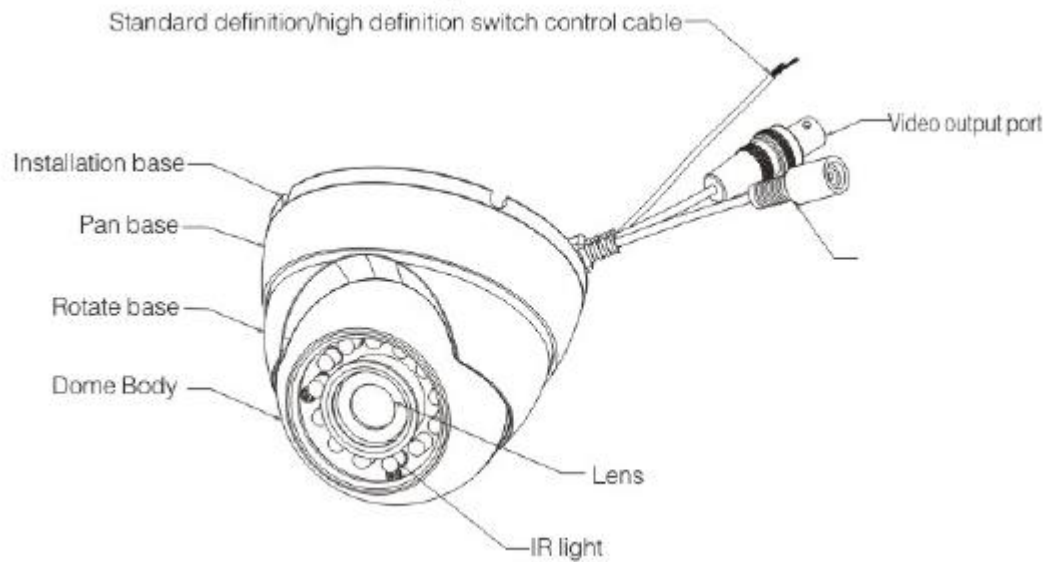


Figure 2-4

When the standard definition/high definition switch control cable is short circuited, the system outputs standard definition video. Otherwise, when the circuit is open, system outputs the high definition video.

## 3 Installation

### Important

- Before the installation, please make sure the installation surface can sustain at least 3X the weight of the bracket and the camera.

### 3.1 AMC1080BC

#### Step 1

Drill three holes in the installation surface of the wall or the ceiling. Insert three expansion bolts to the three holes and then lock firmly.

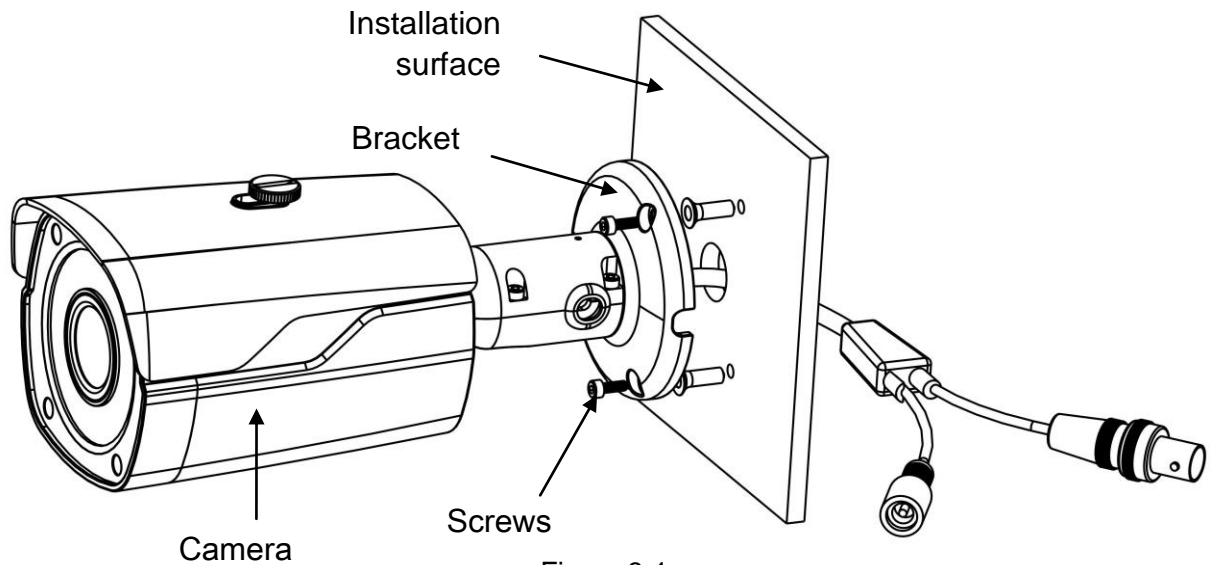


Figure 3-1

#### Step 2

First prepare the cable according to the cable. Line up the three screw holes at the bottom of the bracket to the three installation holes in the wall or the ceiling, and then insert three screws to the three holes of the chassis of the bracket and attach them firmly. Now secure the bracket on the installation surface of the wall or the ceiling.

#### Step 3

Adjust the camera to the proper monitor area via the three directions indicated in Figure 3-2 after you fixed the camera.

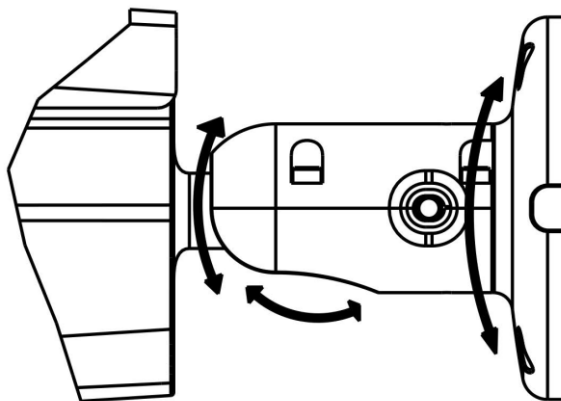


Figure 3-2

#### **Step 4**

Connect the device video output port to the terminal device such as the DVR, NVS, etc. Then connect the power cable to the device.

### **3.2 AMC1080DM**

#### **Step1 Device Installation**

Take the wrench from the accessories bag and use it to loosen the three set screws on the side of the camera body. See Figure 3-3.

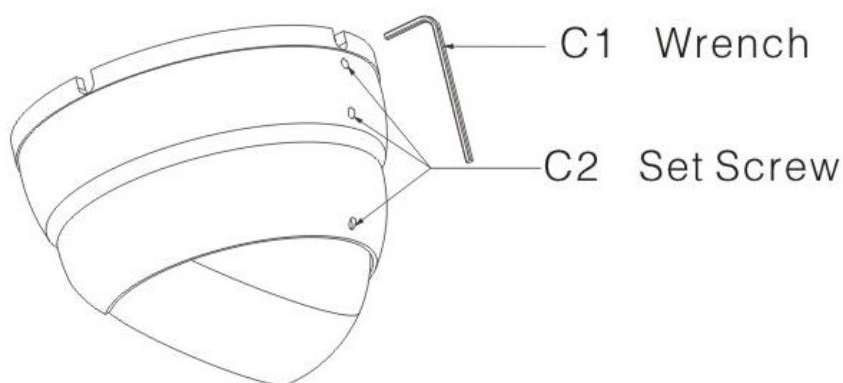


Figure 3-3

#### **Step 2 Pedestal Installation**

Turn the pedestal of the device and then pull the cable through it. Use four screws to secure the pedestal to the proper position. See Figure 3-4.

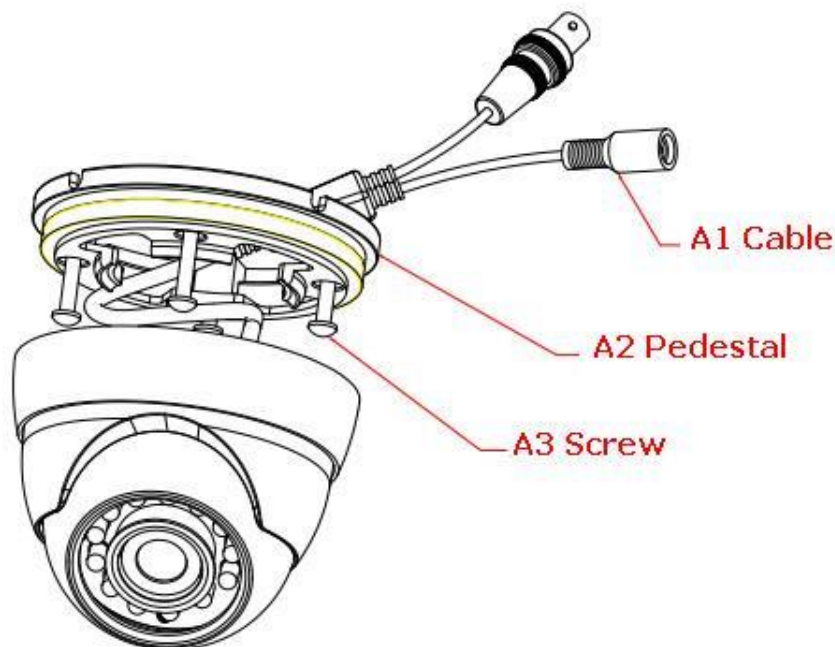


Figure 3-4

#### **Step 3 Adjust Monitor Angle**

Turn the pan base to the pedestal and secure firmly. Adjust rotate base and the dome body to get the lens to the proper monitor angle. See Figure 3-5.

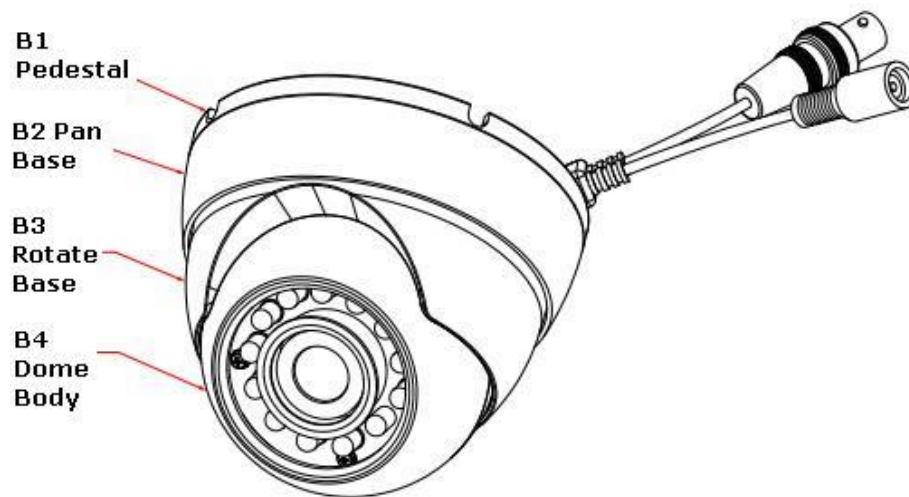


Figure 3-5

**Step 4 Fix Monitor Angle**

To prevent the dome from moving, use wrench to secure the three set screws to secure the monitor angle position.

## 4 Menu

### 4.1 HDCVI Series DVR Settings

#### Note

The following operation and interfaces are for reference only. Please refer to the HDCVI series DVR user's manual for detailed information.

After connecting the camera to the HDCVI series DVR, from Main Menu->Setting->System->PTZ, you need to set the control mode as HDCVI and the protocol as DH-CVI. Click the Save button to save current setup. See Figure 4-1.

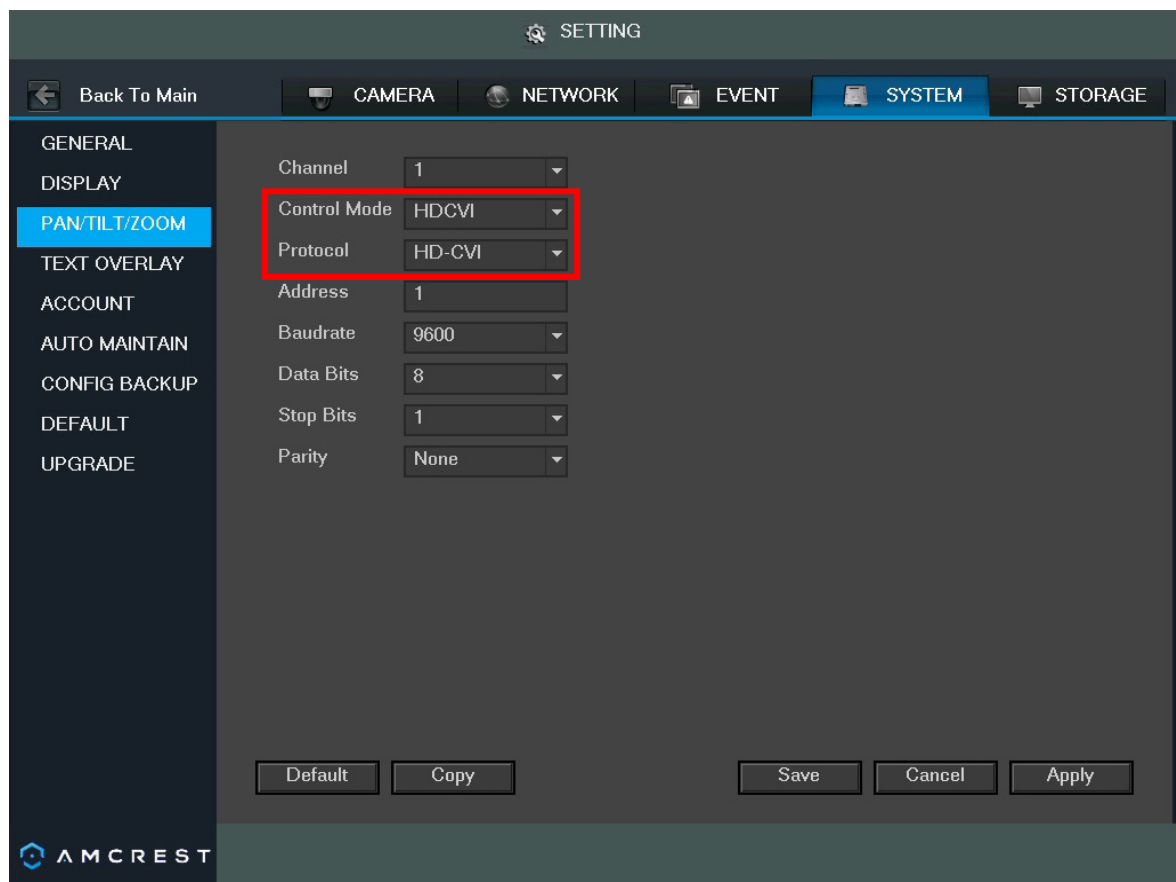


Figure 4-1

On the preview interface, right click the mouse and then select PTZ; you can see the interface shown as below. See Figure 4-2.

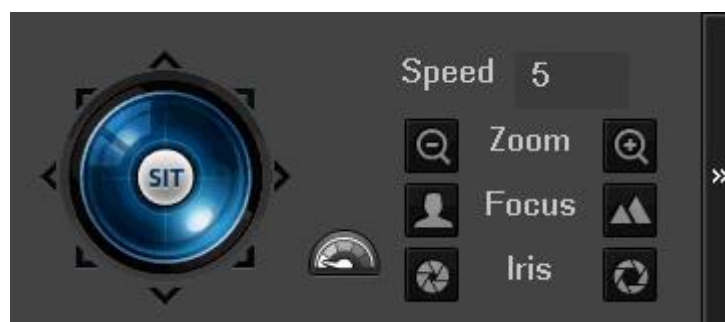



Figure 4-2

Click the Iris  to open menu or confirm current operation.

Click up/down button to view all the items on the left pane of the following list. Click left/right button to set the corresponding values on the right pane of the following list. If there is “↵”, click the confirm button to go to the 2nd menu. Repeat the previous steps to set the detailed value. Click the Return button to go back to the previous menu interface.

## Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Device Construction Material	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T11363-2006 standard.

X: Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T11363-2006 standard. During the environmental-friendly use period (EFUP) period, the toxic or hazardous substance or elements contained in products will not leak or mutate so that the use of these (substances or elements) will not result in any severe environmental pollution, any bodily injury or damage to any assets. The consumer is not authorized to process such kind of substances or elements, please return to the corresponding local authorities to process according to your local government statutes.

### Note

- This manual is for reference only. Slight difference may be found in the user interface.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks mentioned are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website or contact your local service engineer for more information.